Corn development remained ahead of last year's early pace and more than 1 week ahead of normal throughout the month due to above-normal temperatures in the Great Plains and western Corn Belt. Late-maturing fields entered the silking stage in the Great Plains and around the Great Lakes during the first week of the month, and by August 6, silking was 96 percent complete. Meanwhile, fields rapidly entered the dough stage across most of the Corn Belt, despite periods of cooler-than-normal weather east of the Mississippi River. As mid-month approached, fields rapidly entered the dough stage in the western Corn Belt and northern Great Plains, while denting accelerated in the southern Corn Belt. On August 13, one-fourth of the acreage was dented and 63 percent was at or beyond the dough stage. After mid-month, above-normal temperatures continued to promote rapid development in the western Corn Belt and Great Plains, while cooler-than-normal temperatures moderated progress in the eastern Corn Belt and Atlantic Coastal Plains. Development lagged near the Great Lakes throughout the month. When the month ended, about 90 percent of the acreage had reached the dough stage and two-thirds was dented. On September 3, more than one-fourth of the crop was mature and 4 percent was harvested. Conditions slowly deteriorated in the western Corn Belt and Great Plains as the month progressed due to excessive heat and increasing moisture shortages. Above-normal precipitation maintained conditions in parts of the southern and eastern Corn Belt, although severe weather caused isolated wind and hail damage.

Soybeans also developed ahead of last year's early pace and more than 1 week ahead of the 5-year average. Fields rapidly entered the bloom stage in the lower Mississippi and Tennessee Valleys in early August and by mid-month, nearly all of the soybean acreage had reached the bloom stage. In the Corn Belt and Great Plains, fields rapidly entered the podding stage, despite periods of below-normal temperatures in the Dakota's and east of the Mississippi River. After mid-month, above-normal temperatures accelerated podding in the lower Missouri and Mississippi Valleys, but cool weather continued to limit progress in parts of the eastern Corn Belt and Atlantic Coastal Plains. By the end of the month, more than 95 percent of the acreage was setting pods. Triple-digit heat quickly ripened fields in the western Corn Belt and Mississippi Delta near the end of the month, while above-normal temperatures accelerated progress in the eastern Corn Belt. Development was most advanced in Louisiana and Mississippi, where 40 and 37 percent, respectively, was dropping leaves on August 27. Fields also ripened far ahead of normal in Kansas and Nebraska, but progress lagged behind normal in Michigan and North Dakota. On September 3, nearly one-fifth of the acreage was shedding leaves. Conditions steadily declined in the Great Plains, western Corn Belt, and lower Mississippi Valley due to hot, dry weather. Cooler weather and adequate precipitation limited deterioration around the Great Lakes and in parts of the southern and eastern Corn Belt.

The winter wheat harvest advanced to 95 percent complete on August 6, about 1 week ahead of last year and the average for this date. Dry weather aided rapid progress in the northern Great Plains and Pacific Northwest, especially in Montana, where growers harvested nearly one-half of their crop during the first week of the month. The oat harvest progressed about 1 week ahead of last year and the 5-year average in the Corn Belt and Great Plains and was 95 percent complete on August 27. The harvest season ended near mid-month in Iowa and Nebraska. The harvest pace remained active in Minnesota, North Dakota, and Pennsylvania during the second half of the month. Hot, dry weather quickly ripened spring wheat and barley fields and aided harvest progress in the upper Mississippi Valley, across the northern Great Plains, and into the Pacific Northwest. Harvest was very active in South Dakota early in the month, where growers harvested 50 percent of the spring wheat during the first week of the month. On August 27, the spring wheat harvest was complete in South Dakota, and the barley harvest neared completion in Minnesota. By September 3, spring wheat and barley were 88 and 92 percent harvested, respectively, about 1 week ahead of the 5-year average and more than 2 weeks ahead of last year's pace. Growers began planting the 2001 winter wheat crop near the end of the month, but the seeding pace was limited by severe topsoil moisture shortages. On September 3, two percent of the winter wheat was planted, slightly behind last year and the average for this date.

The cotton crop developed at a normal pace most of the month. Warm weather accelerated development in Virginia early in the month, where about 50 percent of the crop began setting bolls during the first half of the month. Ninety-six percent of the crop was setting bolls by August 20. Hot weather began to ripen fields in the lower Mississippi Valley and Southwest early in the month, accelerating progress as mid-month approached. For the 2 week period ending August 20, bolls began opening on 54 percent of the Louisiana acreage. After mid-month, cotton rapidly ripened in interior areas of the Mississippi Delta. Acreage with open bolls advanced 34 percentage points in Mississippi during the week ending August 20. Acreage with bolls opening rapidly progressed in Arkansas, Missouri, and Tennessee during the week ending August 27. Below-normal temperatures and excessive rainfall hindered development along the Atlantic Coastal Plains, especially after mid-month, as bolls opening remained well behind the 5-year average in North Carolina and Virginia. Fields matured ahead of normal in Arizona due to hot weather, while fields ripened behind normal in California due to slightly below-normal temperatures. Conditions deteriorated in the southern Great Plains, Mississippi Delta, and most of the Southeast due to extreme moisture shortages and excessive heat. In Alabama and Georgia, scattered late-month rains provided isolated, temporary drought relief. On September 3, harvest was 10 percent complete in Texas.

The rice crop slowly headed in the interior Mississippi Delta States, despite warmer-than-normal temperatures during most of the month. Harvest progressed ahead of the 5-year average along the western Gulf Coast. On September 3, the rice harvest was 27 percent complete. The sorghum crop also developed ahead of normal during August. On September 3, 81 percent was turning color and 50 percent was mature, compared with the normal pace of 62 percent turning color and 30 percent mature. Excessive rain hindered peanut development along the Atlantic Coastal Plains, while severe drought restricted pegging in the Southeast.